

ABSTRACT

Apparatus for optically pumping a clad amplifier fiber includes one or more transmission fibers arranged and configured to insert pump-light from a pump light source such as a diode-laser into the cladding of the amplifier fiber. The pump light propagates  
5 through the cladding and a portion of the pump light is absorbed in the doped core of the amplifier fiber. At least one of the transmission fibers is arranged to receive an unabsorbed portion of the propagated pump light from the amplifier cladding and re-insert the unabsorbed portion of the pump-light into the cladding for re-propagation through the cladding. This provides that pump light that would otherwise be wasted is circulated through  
10 the amplifier fiber for further absorption by the amplifier core.